

REMARKS

Initially, Applicants would like to express their appreciation to the Examiner, Mr. Alvin Stewart, for the courtesy of the telephone interview conducted with their attorney Ms. Linda Hodge, on January 26, 2007. During the telephone interview, the claims were discussed and compared to the prior art applied by the Examiner in the rejections, *i.e.*, LIN (U.S. Patent No. 6,080,158); and LIN (U.S. Patent No. 6,325,827). It was agreed that Applicants' intervertebral spacer including claw portions that extend from one side to the other side and from the front to the rear of the spacer is not taught by the combination of the cited prior art of the pending rejection; and that independent claims 1 and 6 should be amended to overcome the pending rejection. Further, the Examiner noted that claim 1 is unclear on line 9, as it is unclear to which surfaces (*i.e.*, the pair of side surfaces, the front side, or the rear side) the phrases "one side surface" and "the other side surface" refer. Additionally, the Examiner noted that the rejection under 35 U.S.C. § 103(a) contained a typographical error; on page 2, claims 1, 2, and 4-6 should have been rejected under 35 U.S.C. § 103(a) over LIN (U.S. Patent No. 6,080,158) in view of LIN (U.S. Patent No. 6,325,827). Accordingly, Applicants have presented claims 1 and 6, amended as noted above, in order to place the claims in condition for allowance.

Applicants would also like to express appreciation to the Examiner for the detailed Official Action provided.

Upon entry of the above amendment, claims 1 and 6 will have been amended. Accordingly, claims 1, 2, and 4-6 are currently pending. Applicants respectfully request reconsideration of the outstanding rejection and allowance of claims 1, 2, and 4-6 in the present application. Such action is respectfully requested and is now believed to be appropriate and proper.

The Examiner has rejected claims 1, 2, and 4-6 under 35 U.S.C. §103(a) as being unpatentable over LIN '158 (U.S. Patent No. 6,080,158) in view of LIN '827 (U.S. Patent No. 6,325,827).

Although Applicants do not necessarily agree with the Examiner's rejection of claims 1 and 6 on this ground, nevertheless, Applicants have amended independent claims 1 and 6 to clearly obviate the above noted ground of rejection in order to expedite prosecution of the present application. Applicants respectfully submit that LIN '158 and LIN '827 fail to teach or suggest the subject matter claimed in claims 1 and 6, as amended. In particular, claim 1 sets forth an intervertebral spacer including, inter alia, “a body defined by a pair of upper and lower surfaces, a pair of side surfaces connected to the upper and lower surfaces, a front end side of the intervertebral spacer, and a rear end side of the intervertebral spacer”; and a withdrawal preventer formed on the upper and lower surfaces of the body, “wherein the withdrawal preventer comprises a plurality of linear claw portions continuously extending from one of said pair of side surfaces of the body to the other of said pair of side surfaces of the body and continuously extending from said front end side of the body to said rear end side of the body”.

Claim 6 sets forth an intervertebral spacer including, inter alia, “a body defined by a pair of upper and lower surfaces, a pair of side surfaces connected to the upper and lower surfaces, a front end side of the intervertebral spacer, and a rear end side of the intervertebral spacer”; and a withdrawal preventer formed on the upper and lower surfaces of the body; “wherein the withdrawal preventer comprises a plurality of linear claw portions extending from one of said pair of side surfaces of the body to the other of said pair of side surfaces of the body and extending from said front end side of the body to said rear end side of the body”.

This amendment is fully supported by the specification, including the claims and drawings, and no prohibited new matter has been added. In particular, support for the above amendment can be found at least in the figures. Further, support for the above amendment can also be found in the specification on page 4, lines 9-13 (“a front end portion 9 of the main body 3 is formed in a tapered curved surface”; “a rear end portion 11 of the main body 3”); on page 4, lines 17-20 (“On an upper surface 5 and a lower surface 7 of the main body 3, from one side of the intervertebral spacer 1 to the other side, claw portions 17 for preventing withdrawal are formed”); page 5, lines 1-16 (“In the main body 3, the claw portions 17 on the upper and lower surfaces 5 and 7 are arranged along imaginary slanting planes 19A and 19B slanting in such a way that the distance between the upper surface 5 and the lower surface 7 becomes narrower in the rear side 11 than in the front side 9. The ridges (vertexes) of the claw portions 17 are arranged along a curved surface 21A (or 21B), and the top portion of the claw portions 17 is positioned at the middle portion in the cross direction of the main body 3. The front portion 9 formed in the tapered curved surface protrudes from near the portions where the slanting surfaces 19A and 19B cross the curved surfaces 21A and 21B at the front end side. The rear end surface is positioned near the portions where the slanting surfaces 19A and 19B cross the curved surfaces 21A and 21B at the rear end side”). Accordingly, in Applicants’ claimed intervertebral spacer, the linear claw portions continuously extend from one of the pair of side surfaces of the body to the other of the pair of side surfaces of the body and continuously extend from the front end side of the body to the rear end side of the body”.

The LIN ‘158 intervertebral fusion device includes a body formed by a plurality of body portions separated by elastic slots 110, 111. Therefore, the body (*i.e.*, the entire body including all of the body portions and all of the elastic slots therebetween) extends from the front of the

intervertebral device to the rear of the intervertebral device, and includes interruptions between the body portions. Accordingly, since the body (*i.e.*, the entire body) and the claw portions on the body in the LIN '158 device include interruptions, Applicants' claimed withdrawal preventer including linear claw portions "continuously extending from one of said pair of side surfaces of the body to the other of said pair of side surfaces of the body and continuously extending from said front end side of the body to said rear end side of the body" as recited in amended claims 1 and 6 cannot fairly be read on the *body and claw portions including interruptions* of LIN '158. Further, each body portion of the LIN '158 device extends only partially from the front side of the fusion device to the rear side of the fusion device. No body portion of the LIN '158 device "is defined" by a pair of upper and lower surfaces, a pair of side surfaces, and "a front end side of the intervertebral spacer, and a rear end side of the intervertebral spacer". Accordingly, the LIN '158 patent fails to show an intervertebral spacer including, *inter alia*, "a body defined by a pair of upper and lower surfaces, a pair of side surfaces connected to the upper and lower surfaces, a front end side of the intervertebral spacer, and a rear end side of the intervertebral spacer"; and a withdrawal preventer "wherein the withdrawal preventer comprises a plurality of linear claw portions continuously extending from one of said pair of side surfaces of the body to the other of said pair of side surfaces of the body and continuously extending from said front end side of the body to said rear end side of the body", as recited in claims 1 and 6, as amended.

The LIN '827 patent is directed to an intervertebral implant which includes a pair of walls 22a, 22b and an opening such that the barbs 24 do not continuously extend from one side of the body to the other. Accordingly, the LIN '827 patent fails to teach or suggest protrusions that are "continuously extending from one of said pair of side surfaces of the body to the other of said pair of side surfaces of the body and continuously extending from said front end side of the

body to said rear end side of the body” as recited in claims 1 and 6. Therefore, the LIN ‘827 patent fails to cure the deficiencies of the LIN ‘158 device, and even assuming, arguendo, that the teachings of LIN ‘158 and LIN ‘827 have been properly combined, Applicants' claimed intervertebral spacer would not have resulted from the combined teachings thereof.

Further, there is nothing in the cited prior art that would lead one of ordinary skill in the art to make the modification suggested by the Examiner in the rejection of claims 1, 2, and 4-6 under 35 U.S.C. § 103(a) over LIN ‘158 in view of LIN ‘827. In this regard, Applicants respectfully point out that the LIN ‘158 patent and the LIN ‘827 patent are directed to entirely different types of spacers.

The LIN ‘158 patent is directed to a spacer 100 having elastic slots 110, 111 therein that allow deformation of the spacer 100 when inserted into a bone. In other words, the spacer 100 of LIN ‘158 *requires* the elastic slots 110, 111 in order to deform. Without deformation, the LIN ‘158 device would not function properly.

However, the LIN ‘827 patent is directed to a spacer having a hole 27 filled with a bone graft bag. The bone graft material of LIN ‘827 *opposes any deformation of the spacer*. This is in contradistinction to the *required deformation* of the LIN ‘158 device. Accordingly, the LIN ‘158 patent and the LIN ‘827 patent teach entirely different types of spacers; and the LIN ‘158 patent *teaches away* from providing any material or elements which would tend to oppose the required deformation of the LIN ‘158 device. Therefore, it would be undesirable, to combine the deformable LIN ‘158 device and the nondeformable LIN ‘827 device.

Thus, the only reason to combine the teachings of LIN ‘158 and LIN ‘827 results from a review of Applicants' disclosure and the application of impermissible hindsight. Accordingly,

the rejection of claims 1, 2, and 4-6 under 35 U.S.C. § 103(a) over LIN '158 in view of LIN '827 is improper for all the above reasons and withdrawal thereof is respectfully requested.

Applicants submit that dependent claims 2, 4, and 5, which are at least patentable due to their dependency from claim 1 for the reasons noted above, recite additional features of the invention and are also separately patentable over the prior art of record based on the additionally recited features.

Accordingly, Applicants respectfully request reconsideration and withdrawal of all the rejections, and an early indication of the allowance of claims 1, 2, and 4-6.

#### SUMMARY AND CONCLUSION

In view of the foregoing, it is submitted that the present amendment is proper and that none of the references of record, considered alone or in any proper combination thereof, anticipate or render obvious Applicants' invention as recited in claims 1, 2, and 4-6. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, consideration of the present amendment, reconsideration of the outstanding Official Action, and allowance of the present amendment and all of the claims therein are respectfully requested and now believed to be appropriate.

Applicants have made a sincere effort to place the present application in condition for allowance and believe that they have now done so.

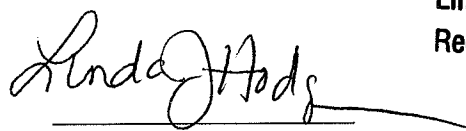
Any amendments to the claims which have been made in this amendment, which do not narrow the scope of the claims, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered cosmetic in nature, and to have been

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made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should there be any questions, the Examiner is invited to contact the undersigned at the below listed number.

Respectfully submitted,  
Shigenobu SATO et al.

A handwritten signature in cursive script, appearing to read "Linda J. Hodge", written over a horizontal line.

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